

The Chemical Age

A Weekly Journal Devoted to Industrial and Engineering Chemistry

BOUVERIE HOUSE, 154, FLEET STREET, LONDON, E.C.4

Telegrams: ALLANGAS FLEET LONDON
GLASGOW: 116, Hope Street (Central 3970)

Telephone: CENTRAL 3212 (10 lines)
BIRMINGHAM: Daimler House, Paradise Street (Midland 0784-5)

THE CHEMICAL AGE offices are closed on Saturdays in accordance with the adoption of the five-day week by Benn Brothers, Limited

VOL. XLII. No. 1093

June 8, 1940

Annual Subscription, 21s.
Overseas, 26s.

Notes and Comments

Chemists Wanted !

AS a result of the second survey of workpeople employed in certain essential industries, which the Ministry of Labour and National Service has been making during the past week, it is to be noted that more operatives are required for national service in the chemical, explosives, and oil and paint manufacturing industries. The requirements of Government Departments for chemists exceed the known supply. About 6000 persons have put their names on the pure chemistry and industrial chemistry sections of the Central Register of persons with technical, scientific, and professional qualifications, but most of them are already in useful and frequently nationally important employment. The Ministry of Labour and National Service now announces that "it is essential that the names of all chemists of either sex, especially young men and women, who are both qualified and willing, should be on the register." Volunteers should write to the Ministry's Central Register Branch, chemistry sections, at Queen Anne's Chambers, Westminster, S.W.1. The minimum qualification for enrolment is a degree in chemistry, or an equivalent qualification, or several years' experience in chemical practice in industry. There is also immediate requirement for juniors, normally of inter-B.Sc. standard and preferably with laboratory or factory experience, who are available for such employment as that of laboratory or experimental assistant. Applicants for these junior posts should apply for enrolment in the supplementary register at local offices of the Ministry, the addresses of which can be obtained from post offices.

Italy's Supplies

IN view of the threatening attitude of Italy to-day, the article which we publish in this week's issue on "Chemical Progress in Italy" possesses a particular interest. The news which it contains has been transmitted to London by several different correspondents, and it is to be noted that the Italian chemical industry is not only distributed over many provinces of European Italy, but is also being developed in the Italian possessions in Africa. It remains to be seen how communication is to be maintained between these colonies and Italy under warlike conditions. For many years back the ultra-national policy of Italy has been striving towards a position of "autarky," or self-sufficiency; but it is a well-known fact that the country is very far from attaining this object. The Italian sources of mercury and sulphur are famous; but, when it comes to a question of fundamental materials like coal and oil, grave deficiencies are revealed. The only

native Italian source of coal is at Arsa, on the East coast of Istria (though elsewhere there are supplies of lignite of dubious quality), a district which is well protected by the naval station of Pola; oil sources are entirely lacking. As far as the supply of vital materials is concerned, therefore, Italy as an ally of Germany would appear more of a liability than an asset; the assessment of her value in other directions need not be discussed here.

The Privilege of the Workshops

LET there be no mistake about it. The retreat from Belgium and the evacuation from Dunkirk are the writing on the wall for the Germans and for any who may be so reckless or crazy as to go to war in alliance with them. For the first time a Hitler coup has not come off, and the dangerous legend of German invincibility has been shattered. Great Britain and France have lost important territory and valuable equipment, but their armies remain intact and their separation has only been momentary. Let a great strategical success be granted to the Germans; something more inspiring and momentous has fallen to the Allies, a moral victory. To turn it into a victory in the field is the task, and indeed the proud privilege of the workshops and factories at home. The soldiers, sailors and airmen have proved they are unbeatable, but they must have aeroplanes, tanks and guns on a scale never before attempted in these islands. The lesson of the last fortnight has not been lost on the millions who bear British industry on their shoulders. Men and women up and down the country are working overtime and all the time at the behest of the most truly National Government ever formed in Great Britain for the succour of the bravest army which ever espoused a national cause. British industry solemnly undertakes that the fighting men shall not lack any of the indispensable means of victory, and this guarantee will never be repudiated.

No Slacking in the Munitions Drive

IN a statement issued to the Press last week, the Minister of Supply, Mr. Herbert Morrison, announced that there had been a splendid response to the Government's appeals for harder and longer work in the munitions industries. Already the rate of output showed the effect of the new spirit that animated the management staffs and workpeople alike. Essential munitions were coming forward more swiftly and the rate of growth in our arms production machine was accelerating. The figures which had been before him assured that the increase in the rate of output was very marked. There were, of course, problems and difficulties, and also some ques-

tions to be settled that would call for everything that we possess in the way of initiative, resource and resolution. In exercising his new powers of control he would avoid any interference for its own sake and would impose the minimum of interference upon factories and works which showed by their own results that they were efficiently conducted and were doing their work with determination and public spirit. Should there be instances, however, which showed signs of slackness, irresolution, slow starting, or muddle, he would not hesitate to use the full rigour of the powers of control that had been conferred upon him. In so doing he would be acting in the spirit of absolute determination that no personal or material vested interests and no past habits of thought should be allowed to stand in the way for one moment of our drive for victory. From our own knowledge of what is going on in the chemical and chemical engineering industries we most heartily endorse the admiration which Mr. Morrison expressed and which the whole country feels for the devotion that many hundred of thousands of workpeople are showing in giving up their leisure and flinging themselves into the laborious and exacting tasks allotted to them as their share of the nation's war effort. Members of these industries, engaged in the munitions drive, can take pride in the extent of their effort to match and be worthy of the wonderful spirit shown by the fighting forces.

Women's Parliamentary Salvage Committee

"IT is impossible to over-estimate the importance of the salvage question," Mr. Morrison said later on. "At present it is unfortunately still true that thousands of tons of essential materials are running to waste—materials for which, as the war develops, it is increasingly difficult to find alternative sources of supply. Metals, paper, rags, food waste and bones, unromantic as they may seem, are of vital importance for our war effort, and it is essential that they should be recovered and put to good use in increasing quantities. For that reason I have appointed a Committee consisting of the women members of Parliament to assist in the salvage drive, believing that they will be able to exercise a particularly helpful influence upon the housewives of the country, whose co-operation is so essential to success. Not that their task will be confined to the housewife—they will be asked to examine the whole machinery of the salvage scheme, including the position of the local authorities, and to advise and assist me on all aspects. The appointment of this Committee is in no sense a stunt. It is a perfectly serious move adopted because I feel it to be the best way of tackling an extremely serious problem, and I make an appeal both to the Press and to the country to pay due regard to the importance of the work which the Committee has been called upon to undertake and to give it all the help in their power. I have faith in the capacity of our women M.P.'s and I believe they will do a real job of work."

Scientific Advisers on the Nation's Food

SIR WILLIAM BRAGG, O.M., President of the Royal Society, has been appointed Chairman of a Scientific Advisory Committee recently set up by the Lord Privy Seal as Chairman of the Food Policy Committee of the War Cabinet. The terms of reference of the new committee are "to consider and advise upon problems of national food requirements and of home food production with special regard to the shipping and foreign exchange likely to be available for imports of food and animal feeding-stuffs, and the labour and other resources likely to be

available for home production." The appointment of the new committee accords with the recommendation embodied in the fourth report of the Select Committee on National Expenditure. The Deputy Chairman of the Scientific Advisory Committee is Sir Alan Anderson; the Secretary is Professor D. S. M. Watson, F.R.S., of the Agricultural Research Council; and the other members are: Professor A. W. Ashby, Professor of Agricultural Economics, University College of Wales, Aberystwyth; Professor E. P. Cathcart, F.R.S., Regius Professor of Physiology at Glasgow University; Mr. Henry Clay; Professor F. L. Engledow, F.R.S., Professor of Agriculture at Cambridge; Mr. W. Gavin, Agricultural Adviser to the Ministry of Agriculture and Fisheries; Sir Edward Mellanby, M.D., F.R.S., Secretary of the Medical Research Council; Sir John Boyd Orr, F.R.S., Director of the Rowett Research Institute, Aberdeen; Professor J. A. Scott-Watson, Professor of Rural Economy at Oxford.

Calcium Carbide in S. Wales

PLANS are well advanced for the erection of a calcium carbide factory in South Wales. According to a report in *The Financial News*, a Dominion company with experience in the power, chemical and carbide industries is co-operating with a large, powerfully connected British company. It is planned to have plant in production early in 1941. The installation will be on a large scale, working a furnace consuming 20,000 kilowatts. This should give an output of some 150 tons of carbide a day, or, say, 55,000 tons a year. Imports from Norway to Britain in 1938 totalled about 42,500 tons, so that the gap caused by the loss of Norwegian supplies will be entirely bridged. In the meantime the national supplies are assured. Ample raw materials of the desired quality are available in Wales. Hitherto this country has relied for its calcium carbide supplies mainly on imports from Scandinavia, where cheap hydro-electric power is the factor that has encouraged the erection of the necessary plant.

Nylon Bristles for Toothbrushes

First British Use of New Raw Material

FROM the middle of June British toothbrushes with nylon synthetic bristles will be on sale throughout the U.K. Nylon monofil, from which the tufts are made, has considerable advantages over hog-bristles. It wears better and does not break off or split in service. It absorbs only 1/5th as much moisture as hogs' bristles and absorbs it more slowly. The surface of nylon is smooth and does not become soggy and dirty in use. It is not susceptible to bacterial attack. It is chemically stable and resists the action of toothpastes. Nylon toothbrushes will retail at the normal prices of high grade brushes.

This use of nylon bristles stresses the economic significance of the new raw material—or rather group of materials. During the past ten years, the supply of natural bristles from North China and Russia has not only been uncertain as regards price and delivery, but has gradually diminished owing to the troubled economic and political conditions of the Far East. With the use of British-made nylon—which it must be emphasised is not a substitute material but superior to the natural product—quality will be uniform, deliveries sure and price fluctuations a thing of the past.

In Great Britain the development of nylon stockings has been postponed by the war, but I.C.I. will continue with the development of nylon for bristles for all kinds of brushes, surgical sutures, etc. Nylon fishing casts are already on the British market and experiments are proceeding on the use of nylon for fishing lines.

CHEMICAL PROGRESS IN ITALY

Montecatini Report—New Plant Erected

AT the annual meeting of the Montecatini S.A., held on March 29, a net profit of over 159 million lire was disclosed for the year 1939, as already briefly announced in THE CHEMICAL AGE. A dividend of 10 lire per share is being distributed and a sum of 20 million lire was allocated for the equipment and completion of the Scientific Institute for Chemical Research and Experimentation now being built at Novara.

The Zama zinc-aluminium alloys had continued to replace brass and bronze for many purposes. A plant with a capacity of 600,000 quintals of calcium cyanamide per annum was in course of construction in the new industrial zone of Apuania where two other large enterprises in the shape of a coking plant and a nitrogenous fertiliser factory would contribute largely to alleviation of distress in the marble industry. In East Africa the associated Compagnia Mineraria Etiopica had continued to develop its mineral research programme which had involved a sum of 23 million lire in 1939 and for which a total expenditure of 45 million lire was anticipated. Gold was already being produced in the Neghelli region. A new aluminium factory will be started up this summer at Bolzano and will make possible a production of 50,000 tons for all Italy in 1941. A total output of 60,000 tons of aluminium is expected for 1942. In the field of industrial chemicals increases were achieved in the production figures for sulphuric acid, oleum, nitric acid, bichromates and carbon bisulphide. The associated Duco concern had greatly expanded its output of glycerophthalic resins for varnishes and of lacquers destined for aeronautical and military use.

Nylon Factory

An arrangement had been made with the Rhodiaceta Company for exploitation of the Du Pont patents covering the manufacture of polyamide resins and textiles (Nylon). In this connection a factory for production of the necessary dibasic acids, amides and resins was under construction at Novara, while a mill for the manufacture of Nylon filaments was being built at Verbania. The production of methyl alcohol, urea and methane had been intensified in the past year. New plants had been installed for phenol and formic acid, while production of anthraquinone at the Cengio factory of the associated A.C.N.A. would soon begin. Research work had been undertaken on new dyestuffs of the Roman-trene and Solindene series. Extensive plants for chlorovinyl resins will enter into production in the near future. In the department of medicinal chemicals notable achievements were the large scale manufacture of diethyl barbituric acid, Tioseptale (related to M & B 693) and Farma 1939 (an important trypanocide on which the field work was carried out in African colonies). In the explosives field it is reported that increased production had taken place of explosives based on an Italian-produced raw material, T, or Pentrite. The factory at Addis Ababa of the associated Ethiopian Explosives Company had entered into production.

Synthetic Cryolite

The manufacture of synthetic cryolite ($\text{AlF}_3 \cdot 3\text{NaF}$), begun in 1933 by the Montecatini S.A. at Porto Marghera, is now reported to have an annual output of 1000 to 1200 tons, and this may shortly be increased to 3000 tons when fresh plant comes into operation. Raw material for this process is hydro-fluosilicic acid which is formed as a 15 per cent. aqueous solution in the course of manufacture of superphosphates from apatite.

Manufacture of ammonium vanadate and disodium phosphate is planned by the Industria Nazionale Alluminio (Milan). A pilot plant for extraction of alumina and potassium sulphate from leucite is to be erected at Bagnoli by the S.A. Leuciti Potassa Alluminio (Florence). Production

of turpentine, rosin and Canada balsam by distillation of pine resin is to be undertaken by the Soc. in Acc. Derivati Resine Autarchiche (Alessandria). Manufacture of alkyl xanthates will be started by the S.A. Appula (Milan). Furfural is to be produced from agricultural waste by the S.A. Fabbrica Formenti (Cartate Brianzi). Extensions to plant for making Plexiglas (a safety glass composed of an acrylic resin) are announced by the Soc. Riunite Ital. Vetri e Cristalli (Venice).

The S.A. Industria Gomma Sintetica, with a capital provisionally fixed at 50 million lire, is to carry out the erection of two large synthetic rubber plants. The first, at Ferrara, based on processes evolved in Italy, is to be completed in 1941; for the second, operating German processes for the exploitation of which a reciprocal agreement had been signed with the I.G. Farbenindustrie, a site had been chosen in the Gualdo Cattaneo lignite basin in Upper Umbria, where it would be possible to use the indigenous lignite deposits, so far almost completely unexploited.

New Cellulose Works

A new large cellulose factory at Chieti had been put into operation on May 1; it was destined to produce, by the chlorine gas process, 200,000 quintals a year (as against the originally proposed 150,000 quintals) of cellulose for paper from wheat straw, supplies of which had been fully secured in the agricultural districts of the Abruzzi, Molise, and Apulia.

Next July the Cuneo plant would also come into operation, with a proposed production, by the sulphate process, of 200,000 quintals of sulphate cellulose for paper from wood, while in October next the inauguration of a third plant is proposed, of equal capacity, by the Società "Celna" at Final di Reno. The fourth large plant—again with a basic potentiality of 200,000 quintals—is being erected at Capua; and is destined for the production of fine cellulose for rayon.

Isolation of Silver Methyl

Silver methyl (AgCH_3) has been isolated by L. Riccoboni by reaction between tetraethyl lead and silver nitrate at the very low temperature of -80°C . It decomposes above -40°C . and its chief interest at present resides in the liberation of free alkyl radicals on decomposition.

POLYHYDROXYLIC ALDEHYDES

A new production of I. G. Farbenindustrie is described in Fr. Pat. 852,136. It notes that it is possible to produce polyhydroxylic aliphatic aldehydes containing at least two CH_2OH groups linked to the carbon atom next to the aldehyde group by reacting, in a water solution, one molecule of a saturated aliphatic aldehyde having at least two hydrogen atoms linked to the carbon atom, with at least two molecules of formaldehyde in a slightly alkaline solution. The alkali seems to play the role of a catalyst, since there is no consumption of alkali. It is proposed to mix 1200 gr. of a 30 per cent. formaldehyde solution with 200 gr. acetaldehyde, adding 10 gr. sodium carbonate and heating for 24 hours to about 40°C . After the addition of a further 5 gr. of soda the solution is heated again for 24 hours and can then be neutralised with dilute sulphuric acid. The water is distilled off under reduced pressure, the residue dissolved in acetone to remove the salts by filtration. The filtrate is desiccated by distillation of the acetone under reduced pressure at 120°C . The result is a water-miscible trimethylated acetaldehyde. This can be heated with four times the same quantity of acetic anhydride, to produce a tetraacetylic compound which, when mixed with water, will break down to triacetyl-trihydroxyaldehyde and acetic acid.

Hot Spraying of Shellac

Improved Method of Coating Surfaces

THE possibility of spraying powdered shellac through a flame gun, as described in Bulletin No. 5 of the London Shellac Research Bureau, was outlined in THE CHEMICAL AGE (41, 1064, p. 345) last November. The technique and apparatus then described required several improvements in order to make the process more easily workable. For instance, the lac powder, in order to be sprayed successfully, had to be screened to between 80 and 120 mesh. In addition, it was found that different grades of lac did not possess the same "free flowing" properties and consequently only a few limited grades of lac could be used. The film of lac obtained was fairly thick and did not possess adequate flexibility. Better adhesion and flexibility can be produced by the incorporation of plasticisers, but such plasticised powders have a tendency to agglomerate to a greater or less degree and the "free flowing" property is generally destroyed. Even without plasticisers, the flow of the powders was found to be affected by changes in temperature and humidity. As a result, channelling or choking occurred in the jet of the container and the lac powder could not be conveyed by the air stream leading to the projector, or gun, from the bottom of the container. Consequently, an upward feed from the powder container was tried.

In this arrangement, air was drawn through the powdered lac directly to the gun. Provided the level of the lac was not too low, the lac powder could be fed effectively to the gun. The feed, however, was irregular and jerky, as the amount of powder carried depended on the velocity of the air as well as the height to which the powder could be lifted; if the level of the powder was high, too much powder was fed to the gun and as the level dropped, more air was necessary to maintain the feed. To maintain a steady supply of powder, a container directly attached to the gun would have to be designed which would be similar to that employed in a liquid spraying plant. Even if such a device was available, the apparatus would be limited by the weight of the container and would consequently have to be filled at frequent intervals. Nevertheless, experiments on these lines showed that the gun itself was satisfactory, but that the feeding device required modification.

In the previously described feeding device, an orifice was provided in the bottom end of the container, the function of which was to give a continuous and steady flow. As this orifice is small, it was thought that the packing that occurred

final arrangement, as shown in the diagram, was, however, found satisfactory.

Compressed air is blown into the primary container 1, the amount of air being controlled by a screw clip attached to a piece of rubber tubing. The lac powder is carried by the air through a side tube near the mouth of the container 1 into the secondary container 2. This latter is covered by a fine wire screen suitably loaded which allows the escape of air but prevents the loss of powder. The powder falls in a fine layer over the orifice and in turn is carried to the gun by suction. As a limited quantity of powder is fed continuously to the container, packing and channelling is avoided.

Spraying Lac Mixtures

Lac powders, coarse or fine, or mixtures of different fineness, could be worked satisfactorily. Particle sizes larger than 60-mesh were found unsuitable, for such coarse particles did not melt during the short passage through the flame and were deflected like projectiles from the surface which was being coated. As there is practically no limit to the size of the primary container, this arrangement should be suitable for large scale and continuous operation.

The most important advantage of this new feeding device is the possibility of spraying powders which are not quite free-flowing. Plasticised lac and mixtures of lac with other materials, such as rubber, bitumen, waxes, synthetic resins and similar materials, can therefore be hot sprayed. Such films will not only have no tendency to craze, but will possess greater resistance to water and specific solvents and in addition will be fairly flexible and tough. If liquid plasticisers are used, it is necessary to melt the required quantities of lac and plasticisers before grinding. Lacs plasticised in this way have been sprayed satisfactorily in actual practice.

Chemical Matters in Parliament

New Calcium Carbide Industry

IN the House of Commons recently Mr. Malcolm MacMillan asked the Minister of Supply whether, in view of recent events in Norway, the Government would now establish in the Scottish Highlands water-power area a calcium carbide industry, in view of the urgent importance of that commodity, and the relative safety from enemy action of that area.

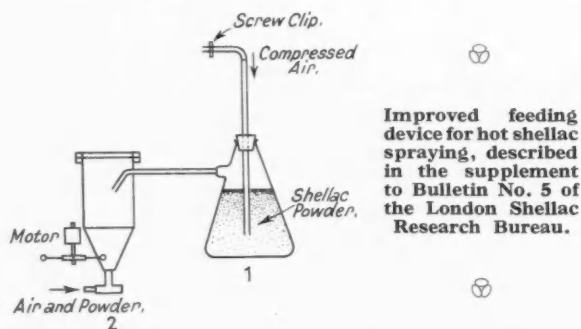
Mr. H. Morrison replied that our requirements for calcium carbide had been provided for for some time to come. The proposals referred to would be considered along with others, but it had to be remembered that a new hydro-electric power scheme could not be brought into operation for some considerable time.

Benzol

Mr. Etherton asked the Secretary for Mines whether, if gas undertakings adopted the request contained in his letter to them by installing or extending benzol plants, he would give an assurance that they would, for that purpose, be guaranteed an appropriate additional supply of coal, so that the money expended on such plants would not be wasted; and whether the price they received for benzol would be correlated to the price of coal and not coupled to the pool price of petrol in the Gulf of Mexico.

Mr. Grenfell replied that he could assure the hon. Member that every endeavour would be made to provide adequate supplies of coal for gas works, particularly where those were recovering benzol.

Mr. Grenfell added that the question of prices did not fall under his Department. It was a matter for the Department of the Secretary for Petroleum Supplies.



was caused mainly by the weight of the powder in the container. This stoppage of flow could be prevented if the powder was delivered continuously in small quantities into the container. A combination of direct suction of the powder and use of the orifice has been tried with success. The suction caused by the flow of compressed air through the gun was not sufficient to draw enough powder from the main container to the second container provided with the orifice. The

Personal Notes

DR. C. J. T. CRONSHAW, chairman of the Dyestuffs Group of Imperial Chemical Industries, Ltd., has been elected a director of the Manchester Ship Canal Co.

* * *

DR. JOHAN WILLEM BEYEN and MR. SIDNEY JAMES VAN DEN BERGH have been appointed members of the board of Lever Brothers and Unilever, Ltd.

* * *

Colwyn Gold Medals have been presented by the Institution of the Rubber Industry to DR. P. SCHIDROWITZ, F.C.S., and DR. H. P. STEVENS, F.I.C., in recognition of their services to the Industry and the Institution.

* * *

The American Section of the Society of Chemical Industry announces the election of the following officers for 1940-41: Chairman, DR. LINCOLN T. WORK; Vice-chairman, DR. FOSTER DEE SNELL; Hon. Secretary, MR. CYRIL S. KIMBALL; Hon. Treasurer, MR. J. W. H. RANDALL.

* * *

MR. W. E. WOOLLEY, one of the directors and proprietors of Messrs. Cupal, Ltd., manufacturing chemists, King Street, Blackburn, was returned unopposed last Saturday as National Liberal M.P. for Spen Valley in the by-election caused by Sir John Simon's elevation to the peerage.

OBITUARY

DR. CHARLES LEE REESE, formerly a director of E. I. Du Pont de Nemours and Co., died recently at Ponte Verde, Florida, aged 77.

* * *

MR. WILLIAM GILMOUR FLEMING, principal for the past 40 years of Messrs. Fleming and Co., explosives and machinery agents, Glasgow, has died at his home at Innellan, Argyll.

* * *

MR. JAMES M'GOWAN, who was in the employ of the United Turkey Red Co., Ltd., Alexandria Works, Alexandria, for 70 years, has died at the age of 82. He was foreman dyer for many years.

* * *

MR. JOHN NEIL REID, manager of Torwood Foundry, Larbert, died in Edinburgh recently. He was 70 years of age and had been in the service of Messrs. Jones and Campbell for 56 years. He was appointed manager in 1912.

* * *

The death in action is announced of Lt.-Col. PURVIS A. KIRSOP, M.C., T.D., J.P., of Bearsden, Glasgow. Colonel Kirsop was senior partner in the firm of A. B. Kirsop and Co., iron and steel merchants, well known on the Clyde. He served with the Argyll and Sutherland Highlanders in the last war and was decorated with the Military Cross for gallantry in the field and, on offering his services in the present emergency, was given command of a regiment in the Royal Artillery. He was one of the survivors of the Gretna troop train accident in 1915.

* * *

MR. CHRISTOPHER RAWSON, F.C.S., F.I.C., died at his home at Whalley Range, Manchester, last week, aged 80. Mr. Rawson had been a Fellow of the Institute since 1888 and of the Chemical Society since 1880. He studied at the Royal College of Chemistry, Kensington, and assisted Professor (now Sir) A. H. Church at the Royal Agricultural College, Cirencester. After serving as chemist at the Marshfields Dye-works, Bradford, he went into practice as an analytical and consulting chemist in that city, devoting special attention to the chemistry of dyeing, and lecturing at Bradford Technical College. He was later associated with the British Cotton and Wool Dyers' Association at Manchester, first as head chemist and later as director. He was the author-in-chief of a Dictionary of Dyes, Mordants, etc., as well as of many articles in the technical Press.

Export Groups Formed

Chemical Traders' Group

AT a recent meeting of members of the British Chemical and Dyestuffs Traders' Association, Ltd., a Chemical Traders' Export Group was formally inaugurated, and this has now received the recognition of the Export Council of the Board of Trade. It has already been announced that 24 firms had signified their intention to join the group. Other firms interested can obtain particulars on application to the Secretary at Coronation House, 4 Lloyd's Avenue, London, E.C.3.

The Chairman of the Group and of its Executive Committee will be Mr. Victor Blagden (Victor Blagden and Co., Ltd.) and Mr. F. G. W. Paige has been appointed secretary. The members of the Executive Committee who have been appointed for a period of six months are: Mr. E. Arnold (R. W. Greeff and Co., Ltd.); Mr. F. G. Farr (Bush, Beach and Gent, Ltd.); Mr. A. F. Lawson (Jensen, Lawson and Co.); Mr. A. Nash (Hughes and Hughes, Ltd.).

Pigment Colour Makers

At a meeting of members of the British Colour Makers' Association held on May 28 the Pigment Colour Makers' Export Group was formally inaugurated and has now received the recognition of the Export Council of the Board of Trade. At the meeting eighteen firms became original members of the Group. Any other firms who are interested can obtain full particulars on application to the Secretary at 166 Piccadilly, London, W.1.

The Chairman of the Group and its Executive Committee is Mr. H. Ralph (Lewis Berger and Sons, Ltd.), the Vice-chairman, Mr. J. B. Dunn (Champion, Druce and Co., Ltd., and Chairman of the British Colour Makers' Association). Mr. Allan J. Holden, B.Sc., F.I.C., will be the Secretary-Manager of the Group. The Executive Committee consists of: Mr. C. G. A. Cowan, of Cowan Brothers (Stratford), Ltd.; Mr. H. G. Ferguson, of Cornbrook Chemical Co., Ltd.; Mr. A. H. Orchard, of The Golden Valley Ochre and Oxide (Colours) Co., Ltd.; Mr. H. Ralph; and Mr. T. Taylor, of I.C.I. (Dye-stuffs), Ltd. Mr. K. Burrell, of J. W. and T. A. Smith, Ltd., is a co-opted member.

EXPORTS FROM FRANCE

By a decree of May 16, published in the *Journal Officiel* of May 17, the export from France of natural or synthetic potassium nitrate, ordinary ammonia, commercially pure ammonia, anhydrous liquid ammonia, ammonium zinc chloride, carbon tetrachloride, red phosphorus, sodium hyposulphite, sodium sulphide, barium nitrate, chlorides and oxides of mercury, metallic sodium, unspecified salts and oxides of strontium, tetrachloroethane, trichlorethylene, butyl alcohol, formic aldehyde in 40 per cent. solution, hexamethylene tetramine and derivatives, acetone, butyl acetate, nitrobenzene, crude nitro-toluene, mononitronaphthalene, chlorodinitrobenzene, aniline and its salts, mono- and dimethylaniline, explosive powders, and dynamite is prohibited, save under licence.

NORWAY: TRADING WITH THE ENEMY

The Trading with the Enemy Branch of the D.O.T. continues to receive inquiries from the public which suggest that doubts still exist as to the application of the Trading with the Enemy Act, and the Orders made thereunder, to Norway. It must be clearly understood that for the purpose of the Act, and of any Orders made thereunder, enemy territory means any area which is under the sovereignty of, or in the occupation of, a Power with whom His Majesty is at war, not being an area in the occupation of His Majesty or of a Power allied with His Majesty. Traders are advised to consult the Trading with the Enemy Branch at Alexandra House, Kingsway, London, W.C.2, in cases of difficulty.

General News

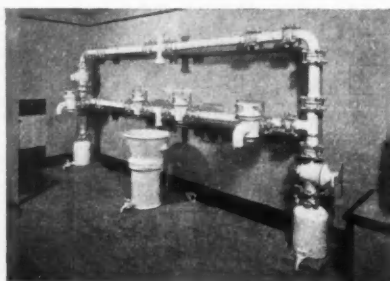
WASTE MATERIALS SALVED during April in the City of Westminster totalled nearly 287½ tons, compared with just over 44 tons in December, according to a report to come before the City Council.

MESSRS. CHEMICOVENS, LTD., of Vintry House, Queen Street Place, London, E.C.4, announce that the recent invasion of Belgium has brought their business to a complete standstill and they have been compelled to close down. Their many friends in the British chemical industry will join us in expressing sincere regrets and sympathy, with the hope for a speedy renewal of their activities.

LONG SERVICE AWARDS were presented last week to 126 employees of Imperial Chemical Industries, Ltd. The presentations were made by Mr. J. G. Gillbert, acting chairman of the General Chemical Group, and the various departments whose members were honoured included Central Traffic Department, Central Laboratory, Liverpool Shipping Department, Gaskell-Marsh works and Pilkington-Sullivan works.

THE TRADING WITH THE ENEMY (Specified Persons) (Amendment) (No. 5) Order, 1940, dated May 28 and coming into operation on May 31, issued by the Board of Trade, adds the names of 159 concerns to the previous schedule and removes four. A number of chemical concerns are mentioned among the names added, including branches of the Bayer and Schering interests and the Soc. de Anilinas; metallurgical names include branches of the Röchling steel interests; the Remy Steel Co., of Tokyo and Kobe; the Uzinele Metalurgice Ploesti, of Ploesti; Ferrostaal, of Buenos Aires; and the Bulgarian Ferro-Chemie Co., of Sofia.

THIS DISPLAY OF ACID-PROOF chemical stoneware is a feature of the main showrooms at Doulton House, Doulton and Co., Ltd.'s new premises on the Albert Embankment, London, S.E.1.



Consisting of a conical flanged pressure pipe line in white acid-proof stoneware, the display epitomises the modernity and efficiency of the new building. The latter is faced with "Carrara-ware" (glazed terracotta) made by Doulton and Co., Ltd.

MR. SEAN LEMASS, Eire Minister for Supplies, stated in the Dail recently that approximately 85 per cent. of Eire's normal requirements of superphosphate had been made available from home sources. Some quantities had been imported, but recent developments in the war had cut off those sources of supply. Alternative arrangements had been made whereby the Irish Sugar Company could secure sufficient supplies to meet the requirements of the whole beet crop. With regard to the prospects of getting raw materials for the manufacture of fertilisers, it was expected that difficulty would be experienced in shipping, but every effort would be made to overcome it. He expected to get supplies from North Africa.

Foreign News

GROSS PROFITS OF THE SOLVAY S.A.R., Rumania, for the year ended December 31, 1939, totalled 320,988,028 lei; net profits totalled 24,879,215 lei.

THE WATER-RESISTANCE OF VULCANISED FIBRE is improved, according to Austrian Pat. 157,423, by allowing cellulose material to swell in zinc chloride solution in presence of emulsified paraffin wax or bitumen. A suitable emulsion is made up from 60 parts paraffin wax, 37 parts water and 3 parts colloidal china clay. This is dispersed in the zinc chloride bath which is warmed to 60° C. before the sheet material is immersed.

From Week to Week

THE OFFICIAL BASIC PRICE for aluminium ingots in France is fixed from May 1 as follows: ingots 99 per cent., 21,703 fr. per ton; ingots 99.5 per cent., 22,258 fr. per ton. Prices for worked products and duralumin have not yet been determined.

A NEW RESEARCH LABORATORY for plastics is to be erected at its Springfield, Mass., plant by the Monsanto Chemical Company. It is expected that a pilot plant for new processes will also be set up.

THE COMMERCIAL SECRETARY to H.M. Legation at Sofia reports that a Royal Decree, promulgated in *State Gazette* No. 90 of April 19, prohibits the exportation from Bulgaria of fatty acids and fatty residues.

IT IS ANNOUNCED at Memphis, Tennessee, that the Allies will immediately begin building a powder plant there, to be operated by the E. I. du Pont de Nemours Co. It will employ 5000, and it is expected to be in operation by the end of this year. It will produce 500,000,000 lb. of powder annually.

GROSS RECEIPTS of the Swedish Boliden concern (heavy chemicals, etc.) for 1939 totalled 22,770,000 kr., against 20,800,000 kr. for 1938. Net profits totalled 8,280,000 kr., against 9,330,000 kr. The dividend is maintained at 15 per cent. Production increased, as against 1938, but the company has issued no figures this year.

THE YUGOSLAVIAN CABINET has issued a decree under which the Minister of Agriculture is empowered to make compulsory the cultivation of the castor oil plant on certain lands. The Minister of Agriculture has already given an order that 3 per cent. of all large holdings in the Danube *banat* must be planted this year with castor oil seeds.

THE EXPORT FROM THE UNION OF SOUTH AFRICA of the Mandated Territory of South-West Africa of scrap metals and crude glycerine (that is, soap lye glycerine and saponification glycerine) is now prohibited except under a permit issued by the Minister of Commerce and Industries or by an officer duly authorised to act on his behalf.

BAUXITE CONSUMPTION IN THE UNITED STATES IN 1939 was the highest in history, according to the Bureau of Mines, United States Department of the Interior. The larger demand came chiefly from the domestic aluminium industry, which established a new record for metal production in 1939, but the abrasive, chemical and other industries also increased their use of bauxite in 1939.

THE ALUMINIUM CO. OF CANADA, LTD., are constructing a plant at Arvida, Que., at an estimated cost of \$100,000, where they will produce a pigment, used principally by paint manufacturers, known as "alpaste." This is a comparatively new product, previously imported, and the Canadian works, estimated to be in operation this month, will manufacture for export as well as domestic trade.

ICE-CREAM MADE FROM SURPLUS COTTON is described in a report in *The Caterer* as "the latest scientific discovery in America, where experts have for many years been seeking some new outlet for the country's huge surplus of cotton." A young pastrycook at Dallas, Texas, is said to have discovered a method by which the cotton fibre may be treated so as to form a base for ice-cream, but details as to the processes involved have not yet come to hand.

NET PROFITS OF THE SANDOZ A.G., Basle, Switzerland, for 1939 amounted to 6,898,000 fr., against 5,343,000 fr. in 1938, the highest figure shown since 1919 and the second highest in the history of the company. Sales activity in 1939 showed a marked improvement, although export business was, of course, hindered by governmental restrictions, quota measures, transfer limitations and other restrictions. The outbreak of war seemed to have a strongly encouraging effect upon business, and a considerable part of the year's profits were made in the last four months, in spite of international currency restrictions. Orders for dyestuffs and textile chemicals were already being given in August for laying up stocks, and these increased rapidly up to the end of the year. Orders for pharmaceutical raw materials showed a more steady increase. Considerable difficulties had been encountered owing to the import restrictions imposed by the belligerents, but, in the circumstances, the position might be regarded as satisfactory.

Weekly Prices of British Chemical Products

VERY little material change falls to be recorded in the general chemical market this week, most departments continuing to report a moderate expansion in the volume of home and export trade. With the approach of the end of the half-year buyers are again directing their attention to the placement of new short-term contracts, and regular calls have been made against existing commitments. Dealers have difficulty in satisfying the requirements of consumers in some directions as a result of the restricted supply position and consequently available quantities of imported material find a ready market at rather high rates. Values generally have remained steady with no important alterations in quotations to record. In the coal tar market a steady trade has been put through and there are no outstanding features to record. Quotations have shown very little alteration on the week and a steady tone prevails throughout.

MANCHESTER.—Increasing activity in the Lancashire textile trades accounts for a large share of the consumption of heavy chemical products in this area, though traders on the Manchester chemical market have reported a steady demand from the rubber, leather and other consuming trades in the district. Altogether, the call for supplies of most of the leading products against orders already on the books is described as satisfactory, whilst a moderate volume of new business is being placed at generally firm prices. With regard to the by-products firmness is also a marked feature, especially among the light materials. Pitch, however, is being

offered at slightly below the highest levels that have been indicated during recent weeks.

GLASGOW.—Transactions in the Scottish heavy chemical trade have continued their activities during the past week, and this is no doubt due to the stimulus given to the factories throughout the country for increased production. Prices are being well maintained, and do not show any sign of decline—in fact, the reverse. There has also been an increased demand for sulphur, and there is still a local scarcity of carbon tetrachloride, Epsom salts, oxalic acid and trisodium phosphate.

Price Changes

Rises: Carbolic Acid, crude (Manchester); Naphthalene, refined (Manchester); Sodium Hyposulphite (Manchester).

Falls: Carbolic Acid, crystals (Manchester); Pitch (Manchester).

* In the case of certain products, here marked with an asterisk, the market is nominal, and the last ascertainable prices have been scheduled. At present all intermediates are included under this head.

General Chemicals

Acetic Acid.—Maximum prices per ton: 80% technical, 1 ton £36 10s.; 10 cwt./1 ton, £37 10s.; 4/10 cwt., £38 10s.; 80% pure, 1 ton, £38 10s.; 10 cwt./1 ton, £39 10s.; 4/10 cwt., £40 10s.; commercial glacial, 1 ton, £46; 10 cwt./1 ton, £47; 4/10 cwt., £48; delivered buyers' premises in returnable barrels. £4 per ton extra if packed and delivered in glass.

Acetone.—Maximum prices per ton, 50 tons and over, £52 10s.; 10/50 tons, £53; 5/10 tons, £53 10s.; 1/5 tons, £54; single drums, £55, delivered buyers' premises in returnable drums or other containers having a capacity of not less than 45 gallons each; delivered in containers of less than 45 gallons but not less than 10 gallons £10 10s. per ton in excess of maximum prices; delivered in containers less than 10 gallons each £10 10s. per ton in excess of maximum prices, plus a reasonable allowance.

Alum.—Loose lump, £9 10s. per ton, d/d, nominal.

***Aluminium Sulphate.**—About £8 per ton f.o.b. Liverpool.

Ammonia Anhydrous.—99.95%, 1s. to 2s. per lb., according to quantity in loaded cylinders, carriage paid; less for important contracts.

Ammonium Carbonate.—£32-£36 per ton d/d in 5 cwt. casks.

Ammonium Chloride.—Grey galvanising, £18 per ton, in casks, ex wharf. See also Sal ammoniac.

***Antimony Oxide.**—£68 per ton.

Arsenic.—99/100%, about £25 per ton, ex store.

Barium Chloride.—98/100%, prime white crystals, £11 10s. 0d. to £13 per ton, bag packing, ex works; imported material would be dearer.

Bleaching Powder.—Spot, 35/37% £10 per ton in casks, special terms for contract.

Borax, Commercial.—Granulated, £20 10s. per ton; crystal, £21 10s.; powdered, £22; extra finely powdered, £23; B.P. crystals, £29 10s.; powdered, £30; extra fine, £31 per ton for ton lots in free 1-cwt. bags, carriage paid in Great Britain. Borax Glass, lump, £64; powder, £65; in tin-lined cases for home trade only, packages free, carriage paid in Great Britain.

Boric Acid.—Commercial granulated, £34 10s. per ton; crystal £35 10s.; powdered, £36 10s.; extra finely powdered, £38 10s.; large flakes, £47; B.P. crystals, £43 10s.; powdered, £44 10s.; extra fine powdered, £46 10s. per ton for ton lots, in free 1-cwt. bags, carriage paid in Great Britain.

Calcium Bisulphite.—£6 10s. to £7 10s. per ton f.o.r. London.

***Calcium Chloride.**—GLASGOW: 70/75% solid, £5 12s. 6d. per ton ex store.

Charcoal Lump.—£10 to £12 per ton, ex wharf. Granulated £11 to £14 per ton according to grade and locality.

***Chlorine, Liquid.**—£19 15s. per ton, d/d in 16/17 cwt. drums (3-drum lots); 4½d. per lb. d/d station in single 70-lb. cylinders.

Chrometan.—Crystals, 4d. per lb.; liquor, £19 10s. per ton d/d station in drums. GLASGOW: Crystals 4d. per lb. in original barrels.

Chromic Acid.—1s. per lb., less 2½%; d/d U.K. GLASGOW: 1s. 0½d. per lb. for 1 cwt. lots.

Chromic Oxide.—Green, 1s. 4d. per lb., d/d U.K.

Citric Acid.—1s. 2d. per lb. MANCHESTER: 1s. 4½d.

***Copper Sulphate.**—Nominal.

Cream of Tartar.—100%, £6 2s. to £6 7s. per cwt., less 2½%, d/d in sellers' returnable casks; imported material would be dearer.

Formic Acid.—85%, £44 10s. per ton for ton lots, carriage paid, carboys returnable; smaller parcels quoted at 46s. 6d. to 49s. 6d. per cwt., ex store.

Glycerine.—Chemically pure, double distilled, 1,260 e.g., in tins, £3 10s. to £4 10s. per cwt. according to quantity; in drums, £3 2s. 6d. to £3 16s. 0d. Refined pale straw industrial, 5s. per cwt. less than chemically pure.

Hexamine.—Technical grade for commercial purposes, 1s. 4d. per lb.; free-running crystals are quoted at 1s. 7½d. to 1s. 10½d. per lb.; carriage paid for bulk lots.

Hydrochloric Acid.—Spot, 6s. 1½d. to 8s. 7½d. carboy d/d according to purity, strength and locality.

Iodine.—Resublimed B.P., 9s. 2d. to 13s. per lb., according to quantity.

Lactic Acid.—Dark tech., 50% by vol., £33 per ton; 50% by weight, £38; 80% by weight, £67; pale tech., 50% by vol., £39 10s.; 50% by weight, £46, 80% by weight, £74. Not less than one ton lots ex works; barrels returnable, carriage paid.

Lead Acetate.—White, £48 to £50, ton lots.

Lead Nitrate.—About £44 per ton d/d in casks.

Lead, Red.—English, 5/10 cwt. £42; 10 cwt. to 1 ton, £41 15s.; 1/2 tons, £41 10s.; 2/5 tons, £41; 5/20 tons, £40 10s.; 20/100 tons, £40; over 100 tons, £39 10s. per ton, less 2½ per cent. carriage paid; non-setting red lead 10s. per ton dealer in each case. Continental material £1 per ton cheaper.

Lead, White.—Dry English, less than 5 tons, £51 10s.; 5/15 tons, £47 10s.; 15/25 tons, £47; 25/50 tons, £46 10s.; 50/200 tons, £46 per ton less 5 per cent. carriage paid; Continental material £1 per ton cheaper; ground in oil, English, 1/5 cwt., £60; 5/10 cwt., £59; 10 cwt. to 1 ton, £58 10s.; 1/2 tons, £57; 2/5 tons, £56; 5/10 tons, £54; 10/15 tons, £53; 15/25 tons, £52 10s.; 25/50 tons, £52; 50/100 tons, £51 10s. per ton less 5 per cent. carriage paid. Continental material £2 per ton cheaper.

Litharge.—1 to 2 tons, £41 per ton.

Magnesite.—Calcined, in bags, ex works, about £12 to £15 per ton.

Magnesium Chloride.—Solid (ex wharf), £12 to £13 5s. per ton.

Magnesium Sulphate.—Commercial, £12 to £14 per ton, according to quality, ex works.

Mercury Products.—Controlled price for 1 cwt. quantities: Bichloride powder, 12s. 3d.; bichloride lump, 12s. 10d.; ammon. chloride powder, 14s. 2d.; ammon. chloride lump, 14s.; mercurous chloride, 14s. 7d.; mercury oxide, red cryst., B.P., 16s. 4d.; red levig. B.P., 15s. 10d.; yellow levig. B.P., 15s. 9d.

***Methylated Spirit.**—61 O.P. industrial, 1s. 5d. to 2s. per gal.; pyridinised industrial, 1s. 7d. to 2s. 2d.; mineralised, 2s. 6d. to 3s. Spirit 64 O.P. is 1d. more in all cases and the range of prices is according to quantities.

***Nitric Acid.**—Spot, £19 to £26 per ton, according to strength, quantity and destination.

Oxalic Acid.—From £60 per ton for ton lots, carriage paid, in 5-cwt. casks; smaller parcels would be dearer; deliveries slow.

***Paraffin Wax.**—Nominal.

Potash, Caustic.—Liquid, £30 to £35 per ton, according to quantity.

Potassium Bichromate.—6d. per lb., carriage paid.

Potassium Carbonate.—96/98%, quoted between £37 10s. and £40 per ton.

Potassium Chlorate.—Imported powder and crystals, ex store London, 10d. to 1s. per lb.

Potassium Iodide.—B.P., 8s. to 11s. 2d. per lb., according to quantity.

Potassium Nitrate.—Small granular crystals, £26 to £29 per ton ex store, according to quantity.

Potassium Permanganate.—B.P., 1s. 4½d. to 1s. 5½d. per lb.; commercial, £7 9s. 6d. to £8 1s. 6d. per cwt., according to quantity, d/d.

Potassium Prussiate.—Yellow, about 1s. 2d. to 1s. 5d. per lb., supplies scarce.

Salammoniac.—Dog-tooth crystals, £50 per ton; medium, £48 10s. per ton; fine white crystals, £16 10s. per ton, in casks, ex store.

Soda, Caustic.—Solid, 76/77% spot, £14 per ton d/d station.

Soda Crystals.—Spot, £5 to £5 5s. per ton d/d station or ex depot in 2-cwt. bags.

Sodium Acetate.—£37 to £40 per ton, ex wharf.

Sodium Bicarbonate.—About £10 10s. to £11 10s. per ton, in bags.

Sodium Bichromate.—Crystals, 5d. per lb., net d/d U.K. GLASGOW: 5½d. per lb., carriage paid.

Sodium Bisulphite Powder.—60/62%, £16 per ton d/d in 2-ton lots for home trade.

Sodium Carbonate Monohydrate.—£20 per ton d/d in minimum ton lots in 2 cwt. free bags.

Sodium Chlorate.—£32 10s. to £41 10s. per ton, d/d, according to quantity.

Sodium Hyposulphite.—Pea crystals, £17 15s. per ton for 2-ton lots; commercial, £13 10s. per ton. MANCHESTER: Commercial, £13 10s.; photographic, £17 10s.

Sodium Iodide.—B.P., for not less than 28 lb., 8s. 10d. per lb.; for not less than 7 lb., 10s. 9d. per lb.

***Sodium Metasilicate.**—£14 5s. per ton, d/d U.K. in cwt. bags.

Sodium Nitrate.—Refined, £9 10s. to £10 per ton for 6-ton lots d/d.

Sodium Nitrite.—£18 15s. per ton for ton lots.

Sodium Perborate.—10%, £4 10s. per cwt. d/d in 1-cwt. drums.

Sodium Phosphate.—Di-sodium, £17 per ton, delivered, for ton lots. Tri-sodium, £20 per ton d/d for ton lots.

Sodium Prussiate.—From 6d. per lb. ex store.

Sodium Silicate.—£8 2s. 6d. per ton, for 4-ton lots.

Sodium Sulphate (Glauber Salts).—£4 10s. per ton d/d.

Sodium Sulphate (Salt Cake).—Unground, Spot, £1 1s. per ton d/d station in bulk. MANCHESTER: £4.

Sodium Sulphide.—Solid 60/62%, Spot, £13 15s. per ton d/d in drums; crystals, 30/32%, £9 10s. per ton d/d in casks. MANCHESTER: Concentrated solid, 60/62 per cent., £13 10s.; crystals, £9 15s.

Sodium Sulphite.—Pea crystals, spot, £16 per ton d/d station in kegs; commercial, £11 per ton d/d station in bags.

***Sulphur Precip.**—B.P., £55 to £60 per ton according to quantity. Commercial, £50 to £55.

Sulphuric Acid.—168° Tw., £6 2s. 3d. to £6 13s. 3d. per ton; 140° Tw., arsenic-free, £4 7s. 6d. to £4 17s. 6d. per ton; 140° Tw. arsenious, £4 per ton; quotations naked at sellers' works.

Tartaric Acid.—1s. 6½d. per lb., less 5%, carriage paid for lots of 5 cwt. and upwards. Makers' prices nominal; imported material 2s. 3d. to 2s. 6d. per lb., ex wharf. MANCHESTER: 1s. 8d. per lb.

Zinc Oxide.—Maximum prices: White seal, £30 17s. 6d. per ton; red seal, £28 7s. 6d. d/d; green seal, £29 17s. 6d. d/d buyers' premises.

Zinc Sulphate.—Tech., about £25, carriage paid, casks free.

Rubber Chemicals

Antimony Sulphide.—Golden, 9½d. to 1s. 7½d. per lb., according to quality. Crimson, 1s. 7½d. to 1s. 11½d. per lb.

Arsenic Sulphide.—Yellow, 1s. 8d. to 1s. 9d. per lb.

Barytes.—Imported material £6 to £9 per ton according to quality.

Carbon Black.—About 7d. to 7½d. per lb., according to quantity.

Carbon Bisulphide.—£31 to £36 per ton, according to quantity, in free returnable drums.

Carbon Tetrachloride.—£48 to £53 per ton, according to quantity, drums extra.

India-rubber Substitutes.—White, 5½d. to 6½d. per lb.; dark 5½d. to 6d. per lb.

Lamp Black.—Imported material is quoted at about £35 to £40 per ton.

Lithopone.—30%, £18 17s. 6d. per ton; 60%, £31 to £32 per ton. Imported material would be dearer.

Sulphur.—Finely powdered, about £15 per ton, delivered.

Sulphur Chloride.—6d. to 8d. per lb., according to quantity.

Vegetable Black.—£35 per ton upwards; 28/30%, £15 10s. 0d.; 60%, £29, delivered buyers' premises.

Vermilion.—Pale or deep, 11s. per lb., for 7 lb. lots.

Zinc Sulphide.—About £63 per ton ex works.

Plus 5% War Charge.

Nitrogen Fertilisers

Ammonium Sulphate.—Per ton in 6-ton lots d/d farmer's nearest station, March/June, £9 6s.

Calcium Cyanamide.—£12 10s. for 5-ton lots per ton net f.o.r. or ex store, London. Supplies small.

***Nitro-Chalk.**—£8 18s. per ton, in 6-ton lots, d/d farmer's nearest station, January/June delivery.

Concentrated Complete Fertilisers.—£11 18s. to £12 4s. per ton in 6-ton lots, d/d farmer's nearest station.

Ammonium Phosphate Fertilisers.—£11 14s. to £16 6s. per ton in 6-ton lots, d/d farmer's nearest station.

Coal Tar Products

Benzol.—Industrial (containing less than 2% of toluol), 2s. to 2s. 1d. per gal., ex works, nominal.

Carbolic Acid.—Crystals, 9d.-11d. per lb.; Crude, 60's, 3s. 3d. to 3s. 6d., according to specification. MANCHESTER: Crystals, 10½d. per lb., d/d; crude, 3s. 9d. to 4s. naked, at works.

Creosote.—Home trade, 4½d. to 5d. per gal., f.o.r., makers' works; exports 6d. to 6½d. per gal., according to grade. MANCHESTER: 4½d. to 7d. per gal.

Cresylic Acid.—99/100%, 2s. 8d. to 3s. 3d. per gal., according to specification. MANCHESTER: Pale, 99/100%, 2s. 9d.

Naphtha.—Solvent, 90/160°, 1s. 7d. to 1s. 8d. per gal.; solvent, 95/160°, 1s. 11d. to 2s., naked at works. MANCHESTER: 90/160° 1s. 11d. to 2s. per gal.

Naphthalene.—Crude, whizzed or hot pressed, £10 to £11 per ton; purified crystals, £23 per ton in 2-cwt. bags; flaked, £23 15s. per ton. Fire-lighter quality, £6 to £7 per ton ex works. MANCHESTER: Refined, £32.

Pitch.—Medium, soft, 50s. per ton, f.o.b. MANCHESTER: 50s. to 52s. 6d. f.o.b. East Coast.

Pyridine.—90/140°, 19s. to 25s. per gal.; 90/160°, 18s. 6d. to 19s. 6d.; 90/180°, 4s. to 5s. per gal., f.o.b. MANCHESTER: 18s. 6d. to 22s. per gal.

Toluol.—Pure, 2s. 5d., nominal. MANCHESTER: Pure, 2s. 5d. per gal., naked.

Xylol.—Commercial, 2s. 9d. per gal.; pure, 2s. 11d. MANCHESTER: 2s. 11d. per gal.

Wood Distillation Products

Calcium Acetate.—Brown, £8 10s. to £9 per ton; grey, £13 to £14. MANCHESTER: Grey: £18.

Methyl Acetone.—40.50%, £42-£45 per ton.

Wood Creosote.—Unrefined, 1s. to 1s. 6d. per gal., according to boiling range.

Wood Naphtha, Miscible.—3s. 10d. to 4s. per gal.; solvent, 4s. to 4s. 6d. per gal.

Wood Tar.—£5 to £6 per ton, according to quality.

*Intermediates and Dyes

m-Cresol 98/100%.—1s. 8d. to 1s. 9d. per lb. in ton lots.

o-Cresol 30/31° C.—8d. to 9d. per lb. in ton lots.

p-Cresol 34/35° C.—1s. 8d. to 1s. 9d. per lb. in ton lots.

Dichloraniline.—2s. 7d. per lb.

Dinitrobenzene.—8d. per lb.

Dinitrotoluene.—48/50° C., 9d. per lb.; 66/68° C., 11½d.

Nitrobenzene.—Spot, 5½d. per lb., in 90-gal. drums, drums extra, 1-ton lots d/d buyer's works.

Nitronaphthalene.—10d. per lb.; P.G., 1s. 0½d. per lb.

o-Toluidine.—1s. per lb., in 8/10 cwt. drums, drums extra.

p-Toluidine.—2s. per lb., in casks.

m-Xylidine Acetate.—4s. 5d. per lb., 100%.

Latest Oil Prices

LONDON.—June 6.—For the period ending July 1, per ton, net, naked, ex mill, works or refinery, and subject to additional charges according to package and location of supplies:—
LINSEED OIL, raw, £46. **RAPESEED OIL**, crude, £44 5s. **COTTON-SEED OIL**, crude, £31 2s. 6d.; washed, £34 5s.; refined edible, £35 12s. 6d.; refined deodorised, £36 10s. **SOYA BEAN OIL**, crude, £33; refined deodorised, £37. **COCONUT OIL**, crude, £28 2s. 6d.; refined deodorised, £31 7s. 6d. **PALM KERNEL OIL**, crude, £27 10s.; refined deodorised, £30 15s. **PALM OIL**, refined deodorised, £33. **GROUNDNUT OIL**, crude, £35 10s.; refined deodorised, £40. **WHALE OIL**, crude hardened, 42 deg., £30 10s.; refined hardened, 42 deg., £33. **ACID OILS**.—Groundnut, £24; soya, £22; coconut and palm kernel, £22 10s. **ROSIN**, 25s. to 35s. per cwt., ex wharf, according to grade. **TURPENTINE**, 53s. per cwt., spot, American, including tax, ex wharf, barrels, and ex discount.

HULL.—June 5.—American turpentine, spot, 55s. 6d. per cwt. in barrels ex store.

Commercial Intelligence

The following are taken from printed reports, but we cannot be responsible for errors that may occur.

Mortgages and Charges

(Note.—The Companies Consolidation Act of 1908 provides that every Mortgage or Charge, as described therein, shall be registered within 21 days after its creation, otherwise it shall be void against the liquidator and any creditor. The Act also provides that every company shall, in making its Annual Summary, specify the total amount of debt due from the company in respect of all Mortgages or Charges. The following Mortgages and Charges have been so registered. In each case the total debt, as specified in the last available Annual Summary, is also given—marked with an *—followed by the date of the Summary, but such total may have been reduced.)

A.U. PRODUCTS, LTD., London, E.C., manufacturing chemists. (M.S., 8/6/40.) May 23, £2000 debenture, to I. J. Fraser, Ide Hill; general charge. *Nil. April 13, 1939.

FRANCOIS CEMENTATION CO., LTD., London E.C. (M.S., 8/6/40.) May 25, £433 5s. charge (sec. 81, 1929 Act), to Cheltenham and Gloucester Building Society; charged on 82 Drysdale Avenue, Chingford. *£130,000. August 4, 1939.

RUSSIAN OIL PRODUCTS, LTD., London, E.C. (M.S., 8/6/40.) May 24, £185,000 debenture, to Moscow Narodny Bank, Ltd.; charged on all real and leasehold property now belonging to the company. *—, June 14, 1939.

WILLIAM PEARSON (PAINTS), LTD., Wolverhampton. (M.S., 8/6/40.) May 22, £1100 debentures; general charge. *Nil. December 27, 1939.

Satisfactions

A.U. PRODUCTS, LTD., London, E.C., manufacturing chemists. (M.S., 8/6/40.) Satisfaction May 23, of debenture registered November 22, 1939.

B.K.L. ALLOYS, LTD., Birmingham. (M.S., 8/6/40.) Satisfaction May 27, of debenture registered October 9, 1936.

H. E. DANIEL, LTD., London, S.E., dealers in drugs, chemicals, etc. (M.S., 8/6/40.) Satisfaction May 22, of charge registered July 26, 1938.

ROBERT BOWMAN AND CO., LTD., Newcastle-on-Tyne, paint manufacturers. (M.S., 8/6/40.) Satisfaction May 25, £1438, registered March 18, 1940.

County Court Judgments

SHEPHERDS HOME PRODUCTS, LTD., R/O, Grove Chemical Works, Wetherall Road, E.9. (C.C.J., 8/6/40.)—Manufacturing chemists. £15 April 19.

Private Meeting

[Inclusion under this heading does not necessarily imply failure. Many private meetings are called in order that the debtor may consult his creditors as to his position, without any suggestion of insolvency.]

INDUSTRIAL FINISHES, LTD. (A.M., 8/6/40.) Meeting of creditors at the offices of Enoch Cox and Co., Certified Public Accountants and Chartered Secretaries, Berrington Chambers, Tottenhall Road, Wolverhampton, on Thursday, June 6, at 2.30 p.m.

Companies Winding-Up Voluntarily

OLD STRAND CHEMICAL AND DRUG CO., LTD. (C.W.U.V., 8/6/40.) Creditors' claims to P. Richards, 24 Coleman Street, London, E.C.2, Liquidator, by June 18. General meeting of members, offices of Messrs. Chalmers, Wade and Co., 24 Coleman Street, London, E.C.2, on Monday, July 8, at 12 noon.

Company News

Turner and Newall, Ltd., have declared an interim dividend of 3½ per cent., less tax, at 6s. 9d., payable July 20.

Orders for the compulsory winding-up of Jetglaze, Ltd., and Imperishable Paint and Varnish Co., Ltd., were recently made by Mr. Justice Simonds.

John Knox (Stoke-on-Trent), Ltd., wholesale chemists, etc., Cannon Street, Hanley, Stoke-on-Trent, have increased their nominal capital by the addition of £9000 beyond the registered capital of £8000. The additional capital is divided into 6000 6 per cent. cumulative redeemable preference and 3000 ordinary shares of £1 each.

Thomas Rowan and Co., Ltd. (formerly Rowan's Chemical Works, Ltd.), agents for chemists, druggists, etc., Unicorn Wharf, Dace Road, Old Ford, E.3, have increased their nominal capital by the addition of £2900 beyond the registered capital of £100. The additional capital is divided into 1450 preference and 1450 ordinary shares of £1.

Chemical Trade Inquiries

Egypt.—An agent established at Cairo wishes to obtain the representation of United Kingdom manufacturers of drugs, chemicals, and preserved foodstuffs for Egypt. (Ref. No. 341.)

Turkey.—An agent established at Istanbul wishes to obtain the representation, on a commission basis of United Kingdom manufacturers of chemicals, metals and alloys, railway material, machinery, and raw materials for Turkey. (Ref. No. 362.)

Chemical and Allied Stocks and Shares

SENTIMENT on the Stock Exchange has continued to be governed by the widespread tendency to await the next phase of the war, and very little business was reported, although British Funds were again in demand at higher prices. Industrial securities were inclined to show a steadier tendency under the influence of the decision to drop the dividend limitation proposals now that they have been rendered redundant by the raising of the Excess Profits Tax to 100 per cent. The dividend limitation proposals bore unfairly on Boots Drug, Dunlop Rubber and other concerns which have invariably followed a conservative policy in the matter of dividends, and shares of these and similar companies showed a small rally this week, following their recent heavy decline.

* * *

At the time of writing Imperial Chemical are lower on balance at 26s. 3d. due to the very reactionary conditions ruling on the Stock Exchange earlier in the week, but a firmer undertone developed. Moreover, the company's preference shares were slightly better at 31s. 9d. compared with 31s. 3d. B. Laporte were around 50s., and business in Fison Packard took place around 38s. 9d., while Greeff-Chemicals 5s. units were quoted at 5s. 7½d. British Drug Houses transferred at 22s., while Cellon preference showed business at 16s. 3d., and Monsanto Chemicals preference shares had a "middle" price of 21s. Lever and Unilever were a few pence better at 24s. 9d., but Swedish Match remained a nominal market at 5s. British Match were quoted at 29s. 9d. Borax Consolidated at 23s. 9d. were within 1s. 3d. of the price ruling a week ago.

* * * * *

Bleachers, Calico Printers and other textile shares on which the dividend limitation proposals would have borne unfairly, became a better market, as did British Celanese, but as in most other directions very little buying was actually in progress. On the other hand, iron and steel securities remained reactionary, because

most companies in the heavy industries will be affected a good deal by the raising of the Excess Profits Tax to 100 per cent. Nevertheless, the prevailing belief is that this would now appear to be more than discounted by current share prices. At the time of writing, Guest Keen have been marked down to 18s. 3d. and Baldwins to 4s. Stewarts and Lloyds, however, were better at 32s. 9d. and Dorman Long improved moderately.

* * *

British Plaster Board 5s. shares were quoted at 8s. and Associated Cement at 44s. 4½d. Barry and Staines, however, were lower at 21s. 3d., as were Michael Nairn at 55s., while Wall Paper deferred were 14s. 6d. and General Refractories 8s. British Oil and Cake preferred ordinary were quoted at 37s. 6d. United Molasses 6s. 8d. shares were firmer at 20s., but Distillers at 53s. 6d. have declined sharply on balance. Triplex Glass 10s. shares remained a steady feature at 20s., while few movements were shown in United Glass Bottle and other shares of glass manufacturing companies. British Glues 4s. shares were slightly lower at 6s., but remained firmly held, awaiting the impending results for the past year's working. Elsewhere Pinchin Johnson at 17s. were within 6d. of the price ruling a week ago, but International Paint went back 1s. 3d. to 77s. 6d.

* * * * *

Boots Drug became a firmer market around 37s. Beechams Pills 2s. 6d. deferred shares were quoted at 7s. and Sangers 5s. shares at 21s. Results of the last-named company are due shortly. Timothy Whites 5s. shares were priced at 20s.

* * * * *

Fears of extension of the war to the Mediterranean had an adverse influence on leading oil shares, which were lower on balance, although they tended to respond to the slightly firmer conditions which developed on the Stock Exchange.

COMPANY MEETING

British Alkaloids, Ltd. (Manufacturers of "T.C.P.")

Continued Progress

The eleventh ordinary general meeting of British Alkaloids, Ltd., was held on Thursday, the 30th May, in London.

Sir Ivor Philipps, K.C.B., D.S.O. (the chairman), presided, and in the course of his speech said:—The year's working has resulted in a profit of £66,758, this figure being arrived at after charging Excess Profits Tax, estimated at £18,500. The comparable figure of profit for the accounts under review with that of the previous year is therefore £85,258, an increase of £23,126, a result which may well be viewed with satisfaction. Your board recommends the following final dividends, viz., the payment of 18.71 per cent., less tax, on the amounts paid up on the 8 per cent. participating preference shares, making 26.71 per cent., less tax, for the year, and 33 per cent., less tax, on the ordinary shares, making 45 per cent., less tax, for the year.

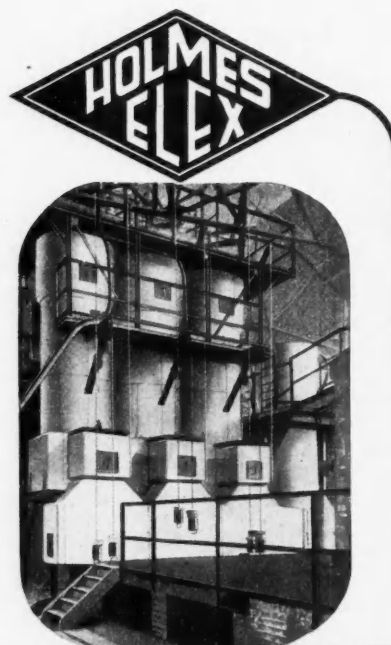
When I last addressed you the international situation gave rise to a certain amount of anxiety. We all know the details of subsequent events, and I will not dwell upon them except to say that it was made obligatory for every business with a staff of 50 or more to provide an air raid shelter. Our shelter is provided with gas doors, air reconditioning plant, auxiliary lighting and seating accommodation, and we are informed that it is considered to be one of the best shelters to be found in the district. I only hope, however, that it will not need to be used, at least for the purpose for which it was erected.

Expansion of Export Business

Sales show an increase of more than 23 per cent. over the previous twelve months. As stated in the report, the export side of our business has materially increased in the Dominion and Colonial markets, and to enable us to cope successfully with further expansion in these and other markets it has been found necessary to add to our existing storeroom accommodation. It will be a source of satisfaction to shareholders to know that the London County Council chose T.C.P. as the antiseptic for use on their trains in connection with the evacuation of children and others last September, and the Council has since ordered our preparation for its air raid ambulance trains.

I will conclude with a few words of appreciation to our secretarial and factory staffs and to Medical Products, Ltd., our marketing agents. It has been a difficult year for them all, but hard work and persistence have succeeded in the face of difficulties, and I am sure you would like to place on record your appreciation and thanks for the way they have all pulled together to achieve these results. In common with other businesses, several members of our staff have already been called up for service with His Majesty's Forces, and we feel that you would wish to join with us in expressing full confidence in their ability to carry out their new duties and in wishing them well.

The report was unanimously adopted.



Electrical Precipitation

An entirely new design of plant for removal of dust or mist from Sulphur Dioxide and other Gases.

Main Advantages

- 1 Low initial cost. This is from 30% to 40% below that of the old type precipitator.
- 2 No expensive brickwork required.
- 3 Considerably less ground space required.
- 4 The interior is more readily accessible.
- 5 Shorter periods of heating up and cooling down.
- 6 Effective heat insulation obtained at a much smaller cost.
- 7 One precipitator usually consists of four units, against two units in the old type. Overload when cleaning one unit is therefore reduced from 100% to 33%, maintaining a high efficiency.



W. C. HOLMES & CO. LTD., TURNBRIDGE, HUDDERSFIELD
London Office: 119 Victoria Street, Westminster, S.W.1

